

Dual Broadband Antenna

65° 1.4 m X-polarized RET Antenna

Part Number:
RA21.7750.00

Horizontal Beamwidth: 65°
Gain: 15/ 18 dBi
12.9 / 15.9 dBd

Electrical Downtilt: Adjustable
Connector Type: 7/16 DIN female

824-960
1710-2170 MHz

The Powerwave broadband antenna design is based on a patented stacked aperture-coupled patch technology, which provides high isolation performance and a wide VSWR bandwidth. The antennas have superior radiation patterns due to a unique reflector design that provides a very small variation of the -3dB horizontal beam width over the frequency band as well as a high front-to-back ratio. Powerwave broadband antennas come with manually adjustable electrical tilt (MET) for tuning flexibility of tilt angles. This design ensures the highest possible cross-polar discrimination value.



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Key Benefits:

- Excellent broad- and multi-band capabilities
- Polarization purity maximizes diversity gain
- Excellent pattern performance and high gain over frequency
- Guaranteed passive intermodulation performance
- Light, slim and robust design

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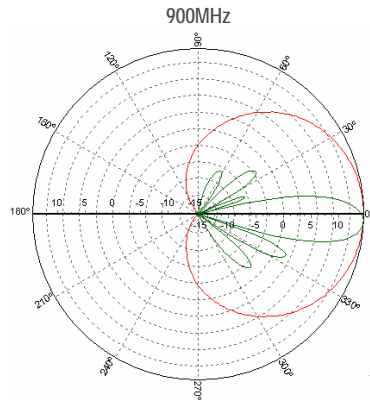
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technologies

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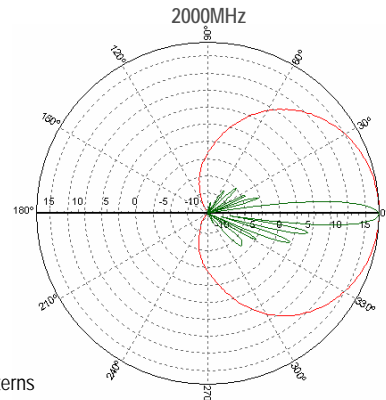
Electrical Specifications

Frequency band (MHz)	824-960	1710-1990	1920-2170
Gain (dBi)	15 ± 0.5	17.3 ± 0.3	18 ± 0.4
Polarization	dual linear ± 45°	dual linear ± 45°	dual linear ± 45°
Nominal impedance (W)	50	50	50
VSWR	>1.5:1	>1.5:1	>1.5:1
Isolation between inputs (dB)	>30	>30	>30
Horizontal -3dB beam width	68° ± 3°	67° ± 2°	62° ± 4°
Tracking, Horizontal plane, ±60°	<1.0 dB	<1.5 dB	<1.5 dB
Electrical down tilt range (adjustable)	2° to 12°	0° to 8°	0° to 8°
Vertical Beam width -3dB MHz	14° ± 2°	7° ± 0.5°	6.2° ± 0.4°
Side lobe suppression, 1st upper (dB)	>21,20,17,16@2,4,8,12°	>18,17,15,14@0,2,4,8°	>18,17,15,14@0,2,4,8°
Side lobe suppression, Vertical Upper (dB)	>12	>12	>12
Vertical beam squint	<1°	<1°	<1°
Front-to-back Ratio (dB)	>26	>30	>30
Front-to-back Ratio, Total Power (dB)	>26	>25	>25
Cross-polar discrimination (XPD) 0° (dB)	>17	>18	>18
Cross-polar discrimination (XPD) ±60° (dB)	>11	>10	>10
IM3, 2Tx@43dBm (dBc)	-153	-153	
IM7, 2Tx@43dBm (dBc)			-160
Power Handling, Average per input (W)	300	250	250
Power Handling, Average total (W)	600	500	500

All specifications are subject to change without notice. Please for complete performance data.



Typical Horizontal and Vertical 7750.00 Patterns



Mechanical Specifications

Connector type (6 pcs)	7/16 DIN female
Connector position	Bottom
Dimensions, HxWxD	1621mm x 280mm x 125mm (5'5.2" x 11" x 5")
Weight, including brackets	19 kg (41.8 lbs)
Wind load, frontal, 42 m/s, Cd=1	435N (98 lbf)
Survival wind speed	70 m/s
Weatherproofing	According to T1102
Radome material	GRP
Radome colour	Grey (RAL 7035 on all visible plastic parts)
Packing size HxWxD	1550mm x 355mm x 255mm (61"x14"x10")
Shipping weight including bracket kit	23kg (50.6lbs)
Mounting	Pre-mounted standard brackets

Corporate Headquarters
Powerwave Technologies, Inc.
1801 East St. Andrew Place
Santa Ana, CA 92705 USA
Tel: 714-466-1000
Fax: 714-466-5800
www.powerwave.com

Main European Office
Antennvägen 6
SE-187 80 Taby
Sweden
Tel: +46 8 540 822 00
Fax: +46 8 540 823 40

Main Asia-Pacific Office
23 F Tai Yau Building
181 Johnston Road
Wanchai, Hong Kong
Tel: +852 2512 6123
Fax: +852 2575 4860

